

Machine Tool Technology

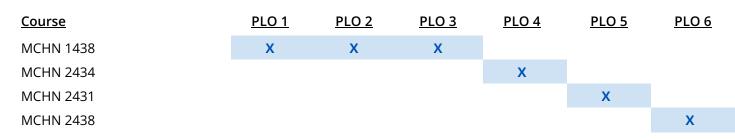
The Machine Tool Technology program provides training for entry-level positions in precision metalworking careers. Manual and computer numerically controlled (CNC) machines are used to develop trainee skills. The students will learn to operate lathes, mills, engine lathes, surface grinders, and other precision equipment. Graduates of this program are prepared to work in machine shops, quality control, and maintenance or production.

Program Learning Outcomes (PLO)

After completing the AAS in Machine Tool Technology degree, students will be able to:

- PLO 1: Demonstrate their knowledge of safety with open discussion and presentation.
- PLO 2: Demonstrate their knowledge of the operation of a manual lathe by the completion of the final project.
- PLO 3: Demonstrate their knowledge of the operation of a manual mill by completion of the final project.
- PLO 4: Write a CNC mill program; set up the mill; and machine a part based on given parameters and instructions.
- PLO 5: Write a CNC lathe program; set up the lathe; and machine a part based on given parameters and instructions.
- PLO 6: Write a CNC program using a CAM program on the CNC lathe and CNC mill based on given parameters and instructions.

Courses Measuring the Achievement of Program Learning Outcomes



MACHINE TOOL TECHNOLOGY RECOMMENDED ACADEMIC PLAN

1ST YEAR, 1ST SEMESTER			Credit Hours	\checkmark
Term 1				
MCHN	2431	Operation of CNC Turning Centers	4	
ENGL	1301	Composition	3	
STSU	0300	Student Success	0	
Term 2				
TECM	1301	Industrial Mathematics	3	
MCHN	1438	Machining I	4	
			14	
1ST YEAR, 2ND SEMESTER				
Term 1	1 1 1 1	Desis Meshine Chen U	4	
MCHN	1441 1100	Basic Machine Shop II Special Tapics in Machine Shop Assistant	4	
MCHN Term 2	1190	Special Topics in Machine Shop Assistant	1	
WLDG	1337	or DFTG 1325	3	
SOCI	1301	Introduction to Sociology	3	
MCHN	2434	Operations of CNC Machining Centers	4	
* Earned		Level 1 Certificate in Machine Tool Technology - Computer		
		Numeric Control	15	
2ND YEA	R, 1ST SE	MESTER		
Term 1				
WLDG	1428	or DFTG 1409	4	
SPCH	1318	Interpersonal Communication	3	
MCHN	1191	Special Topics in Machinist/Machine Technologist	1	
Term 2				_
MCHN	1452	Intermediate Machining I	4	
ARTS	1301	Art Appreciation	3	
₩ Earne a		Level 1 Certificate in Machine Tool Technology - Operator	15	
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	.R, 2ND S	EMESTER		
Term 1			_	
PHYS	1305	Elementary Physics	3	
MCHN	1426	Introduction to Computer-Aided Manufacturing	4	
Term 2	2422		<u>,</u>	
MCHN	2438	Advanced Computer-Aided Manufacturing	4	
MCHN	1454	Intermediate Machining II	4	
MCHN 1191		Special Topics in Machinist/Machine Technologist	1	
₩ Earned:		Associate of Applied Science in Machine Tool Technology Total Hou	rs 60	